

PATENT ABSTRACTS OF JAPAN

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(71)Applicant : MATSUSHITA ELECTRIC IND CO LTD

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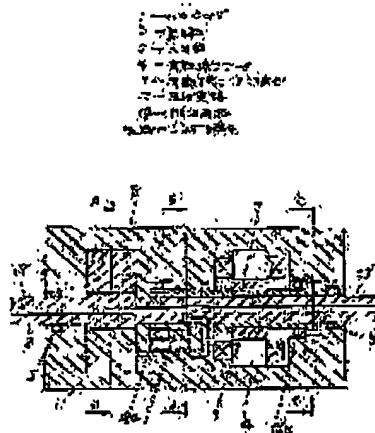
(72)Inventor : FUNASHIYO HIROYUKI
 SEKIGUCHI TAKUYA
 MARUYAMA TERUO

(54) HYDRAULIC ACTUATOR

(57)Abstract:

PURPOSE: To reduce a hydraulic actuator in size and weight by incorporating an electric motor in a housing and disposing a rolling bearing between the housing and the input shaft.

CONSTITUTION: An electric motor comprising an electric motor stator 4 and an electric motor rotor 7 is incorporated in a housing 1, and roller bearings 18a, 18b are disposed between the housing 1 and an input shaft 3, so that the input shaft 3 is supported by the roller bearings 18a, 18b. In this arrangement, the need of oil seal between the input shaft 3 and the housing 1 and between the input shaft 3 and the output shaft 2 is eliminated to lessen sliding friction torque of a seal member, and the driving torque of the input shaft 3 is lessened by the roller bearings 18a, 18b, so that the input shaft is driven by a small-sized electric motor to reduce a hydraulic actuator in size and weight.



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